

## CLAIMS

1. A femoral prosthesis including a stem for insertion in a femoral canal and a shoulder and/or neck portion comprising a proximal sleeve having an outer circumferential surface and comprising at least two proximal sleeve components, each of which provides parts of the circumferential outer surface of the sleeve, and means for securing the proximal sleeve components in position at the proximal end of the stem.

2. The femoral prosthesis as set forth in claim 1 wherein two proximal sleeve components are provided which are located respectively on the medial and lateral sides of the stem.

3. The femoral prosthesis as set forth in claim 2 wherein a lateral sleeve component is provided which also extends to the medial side of the stem and a medial sleeve component fastens to the lateral sleeve component to provide a clamp around the stem.

4. The femoral prosthesis as set forth in claim 3 wherein the lateral sleeve component includes a bore to surround the stem.

5. The femoral prosthesis as set forth in claim 4 wherein the bore is tapered to engage a cooperating taper on the stem.

6. The femoral prosthesis as set forth in claim 2 wherein a medial sleeve component is provided which also extends to the lateral side of the stem and a lateral sleeve component fastens to the medial sleeve component to provide a clamp thereon.

7. The femoral prosthesis as set forth in claim 6 in which the medial sleeve component includes a bore to surround the stem.

8. The femoral prosthesis as set forth in claim 7 wherein the bore is tapered to engage a cooperating taper on the stem.

9. The femoral prosthesis as set forth in claim 1 in which two proximal sleeve components are located respectively on the posterior and anterior sides of the stem.

10. The femoral prosthesis as set forth in claim 1 in which three or more proximal sleeve components are provided which are arranged around the stem.

11. The femoral prosthesis as set forth in claim 1 further comprising a means for separately attaching the shoulder and/or neck portion to the stem.

12. The femoral prosthesis as set forth in claim 1 wherein said at least two sleeve components includes one or more sleeve components each of which is of the same interior shape but which has an alternatively shaped part-circumferential outer surface.

13. The femoral prosthesis as set forth in claim 1 further including means for attaching the shoulder and neck portion of the stem to the stem before or after the stem has been inserted into the bone canal.

14. The femoral prosthesis as set forth in claim 13 wherein the attachable neck is located on a tapered portion on the proximal end of the stem.

15. The femoral prosthesis as set forth in claim 14 wherein the attachable neck is held in position on the tapered portion of the stem by a screw or clip.

16. The femoral prosthesis as set forth in claim 1 wherein the neck portion is provided with means to attach a ball head.

17. The femoral prosthesis as set forth in claim 1 wherein a ball-shaped head is integral with the neck portion.

18. The femoral prosthesis as set forth in claim 1 wherein the means for securing the proximal sleeve portions include screws which engage the stem, or engage another proximal sleeve portion to allow said sleeve portions to be pulled together in tight engagement.

19. The femoral prosthesis as set forth in claim 1 wherein the proximal sleeve portions are arranged to clip onto the stem.

20. The femoral prosthesis as set forth in claim 1 wherein a support for the greater trochanter is provided on one or more of the proximal sleeve portions.

21. The femoral prosthesis as set forth in claim 20 wherein the support for the greater trochanter is separately attachable to one of the proximal sleeve portions.

22. The femoral prosthesis as set forth in claim 1 wherein a projection which acts to prevent subsidence of the stem when implanted is provided on one of the proximal sleeve components.

23. The femoral prosthesis as set forth in claim 22 wherein two or more alternative projecting features are provided for alternative connection to the proximal sleeve component.

24. A kit for implanting a femoral prosthesis comprising:

a trial prosthesis including a trial stem for insertion into a femoral canal, a trial shoulder and/or neck portion and at least two proximal sleeve portions, each having an outer circumferential surface, said at least two trial proximal sleeve components each providing part of the circumferential outer surface of a trial circumferential sleeve and screws for securing the trial proximal sleeve components in position at the proximal end of the trial stem; and

a plurality of prosthetic femoral components.

25. The kit as set forth in claim 24 further including neck portions separately attachable to a stem portion of each femoral component wherein the trial prosthesis includes a similar attachable trial stem portion to allow a femoral prosthesis to be constructed which is identical with the trial prosthesis.

26. The kit as set forth in claim 24 wherein the trial stems for insertion in a femoral canal and the trial shoulder and neck portions are dimensioned and shaped to receive the proximal sleeve portions of the femoral prosthesis, and said screws detachably secure them in place at the proximal end of the trial stem.

27. The kit as set forth in claim 26 wherein a separate and attachable neck portion is provided on the trial prosthesis.

28. A femoral component for implantation in the medullary canal of the femur comprising:

a stem having a proximal portion with a circumferential outer surface;

at least two sleeve portions mounted on the proximal stem portion and surrounding at least part of said circumferential outer surface, each said sleeve portions having an outer surface for placement adjacent an inner surface of the medullary canal and an inner surface for placement adjacent the stem outer surface; and

engageable coupling elements on each of said at least two sleeve portions to the proximal stem portion.

29. The femoral prosthesis as set forth in claim 28 wherein two proximal sleeve components are provided which are located respectively on the medial and lateral sides of the stem.

30. The femoral component as set forth in claim 29 wherein one of the two sleeve portions includes a threaded bore and the sleeve portions are coupled together and clamped around the proximal stem portion with screws.